



Legal and Technical Commission

Distr.: General
30 January 2004

Original: English

Tenth session
Kingston, Jamaica
24 May-4 June 2004

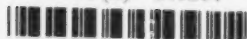
Draft regulations on prospecting and exploration for polymetallic sulphides and cobalt-rich ferromanganese crusts in the Area

Prepared by the Secretariat

1. During the ninth session of the Authority, in 2003, the Legal and Technical Commission requested the Secretariat to prepare a consolidated and comprehensive draft of the regulations on prospecting and exploration for polymetallic sulphides and cobalt-rich ferromanganese crusts in the Area. In addition, the Secretariat was requested to provide the Commission with a paper highlighting the key outstanding issues with respect to the regulations in order to help focus the discussions during the tenth session. The present document therefore contains a summary of the key outstanding issues together with a complete draft of the regulations, taking into account the discussions of the Commission during the ninth session.

A. Background

2. From 1997 to 2000, the main focus of the work of the Authority was on the elaboration of the regulations for prospecting and exploration for polymetallic nodules in the Area. Those regulations were approved by the Assembly in July 2000.¹ However, in August 1998, during the resumed fourth session of the Authority, the delegation of the Russian Federation reminded the Assembly that, in addition to polymetallic nodules, other mineral resources existed in the Area, including hydrothermal polymetallic sulphides and cobalt-rich ferromanganese crusts (cobalt crusts), and requested the Authority to adopt rules, regulations and procedures for exploration for such resources.² Pursuant to article 162, paragraph 2 (o) (ii), of the 1982 United Nations Convention on the Law of the Sea, and paragraphs 15 and 16 of section 1 of the annex to the Part XI Implementation Agreement, such rules, regulations and procedures are to be adopted within three years of the date of such a request. The rules, regulations and procedures shall be based on the principles contained in sections 2, 5, 6, 7 and 8 of the annex to the Agreement.



3. In the light of the request made by the delegation of the Russian Federation, the Authority convened, in June 2000, a workshop on the mineral resources of the Area. The objectives of the workshop were to provide information on the occurrence, technical parameters, economic interest and potential resources contained in mineral resources other than polymetallic nodules, to identify existing institutional factors that had contributed to the discovery of such resources and continuing research on them and to provide information which would assist in drafting rules, regulations and procedures for prospecting and exploration for those mineral deposits, in particular deep sea polymetallic sulphide deposits and cobalt crusts. The workshop was attended by over 60 participants from 34 countries, including several members of the Legal and Technical Commission. Included in the proceedings of the workshop are technical papers on the geology and mineralogy of polymetallic sulphides and cobalt crusts, their distribution and resource potential, as well as the status of research on such resources and the technical requirements for their exploration and future mining. A document prepared for the consideration of the Council at the seventh session in 2001 on considerations relating to the proposed regulations contains a summary of the discussions that took place in the workshop on the possible elements of a regime for prospecting and exploration for polymetallic sulphides and cobalt crusts (ISBA/7/C/2).

4. During the seventh session, the Council held extensive discussions on how to proceed with the consideration of the issues contained in ISBA/7/C/2. It decided to continue its consideration of issues associated with the elaboration of the regulations at the eighth session and in the meantime requested the Secretariat to provide additional background information to facilitate further discussions. It also decided that the Legal and Technical Commission should commence consideration of the issues.

5. Consequently, at the eighth session, in 2002, a one-day seminar was held at which presentations were made by invited experts on the status and prospects for polymetallic sulphides and cobalt-rich ferromanganese crusts.³ Subsequently, the Legal and Technical Commission began preliminary consideration of the subject by reviewing the approaches suggested in ISBA/7/C/2. The Commission emphasized the need to proceed cautiously and in a logical manner towards the development of regulations. It was emphasized that, bearing in mind the uncertainties associated with activities in the Area, any scheme for prospecting and exploration should be subject to review after an initial period. While prospecting and exploration should be encouraged, and potential prospectors should therefore be provided with rights over particular areas and priority to apply for exploration contracts, there was also a need to ensure that the Authority received adequate data and information, particularly with regard to the protection and preservation of the marine environment.⁴

6. The Commission requested the Secretariat to provide it with further information on the problems associated with sulphides and crusts prior to its session in 2003. Key issues associated with the regulations that were identified by the Commission as matters for further discussion included a progressive fee system rather than a relinquishment system, further consideration of the grid system for licensing, and continued development and elaboration of the parallel system as it applied to those resources. At the ninth session, in 2003, the Commission met for two weeks. During the first week, the members of the Commission convened informal working groups for detailed consideration of certain aspects of the

proposed regulations. To facilitate the discussions, the working groups were provided by the Secretariat with relevant background documentation as follows:

(a) Information from relevant national legislation relating to issues associated with the draft regulations on prospecting and exploration for polymetallic sulphides and cobalt-rich crusts in the Area (ISBA/9/LTC/5);

(b) Considerations relating to the regulations for prospecting and exploration for hydrothermal polymetallic sulphides and cobalt-rich ferromanganese crusts in the Area, including model clauses suggested by the Secretariat (ISBA/7/C/2);

(c) Reference materials for model clauses 1, 3, 5, 6 and 8 (prepared by the Secretariat).

The text of the reports of the working groups is reproduced in a consolidated format in ISBA/10/LTC/CRP.1.

B. Draft regulations

7. To facilitate further discussion by the Commission, the annex to the present document contains a complete set of draft regulations. The draft regulations are based on the existing regulations on prospecting and exploration for polymetallic nodules in the Area, but incorporating the model clauses developed by the Secretariat in 2001 together with some of the elements that emerged from discussions in the Commission during 2002 and 2003. The draft is intended to serve only as a basis for further consideration and it is not intended to imply that conclusions have been reached on any of the provisions contained therein.

C. Key outstanding issues

8. To date, discussion of the proposed regulations has proceeded on the general assumption that any regulatory regime for prospecting and exploration for polymetallic sulphides and cobalt crusts should be as close as possible to that for polymetallic nodules. Accordingly, the basic procedures for submitting applications, the rules relating to the qualifications of applicants, the procedures for considering applications in the Legal and Technical Commission and in the Council, and most of the standard clauses of exploration contracts would remain the same as in the Regulations for Prospecting and Exploration for Polymetallic Nodules in the Area. This is because, for the most part, the Regulations on these matters merely reflect the provisions of the Convention and the Agreement and no substantive adjustments would be necessary to deal with resources of a different nature. This conclusion was also reached by the informal working group of the Commission on the form of work plans, which was of the view that the regulatory regime for exploration for polymetallic sulphides and cobalt-rich crusts should be as close as possible to that for polymetallic nodules. In this regard, the working group proposed that the basic procedures for the submission and approval of applications and most of the standard clauses of the exploration contracts would remain the same as in the Regulations. The group further considered that it would be practical and more manageable to have one form of contract for both resources and that only one set of regulations need be elaborated to cover both polymetallic sulphides and cobalt-rich crusts.

9. It has been assumed that the most significant differences in the new regime would relate to prospecting, the size of the area to be allocated to the contractor for exploration, the application of the site-banking system and the procedure for dealing with overlapping claims. Adjustments in these areas would be required in order to reflect the different nature of the resources in question and the different political and economic considerations which apply. Adjustments might also be required to the provisions of the regulations dealing with the protection and preservation of the marine environment, in the light of the different characteristics of the resources and the flora and fauna that are associated with them.

1. Size of areas and relinquishment

10. The informal working group on the size of areas for exploration considered the factors that would need to be taken into account during the process of determining the size of exploration areas for mining ferromanganese crusts and polymetallic sulphides. It was recognized that, while very different in nature from nodule deposits, each of these deposits was of a different character from the others and would require special and separate consideration. The group considered that the elements to be taken into account included the size and maximum number of blocks to be available per contractor, the spatial definition of blocks (on a grid system or not, by geographical coordinates or distance), the spatial organization (contiguous or not), the geometry/dimensions of blocks (length-to-width aspect ratio), the selection process (from predefined grid, or self-selected), relinquishment procedures, time scale, encouragement factors for the contractors and economics of the number of mining sites necessary to sustain contractor operations. The working group was of the view that the size of exploration areas and the relinquishment period must be flexible enough to motivate contractors to carry out their activities in an effective manner.

11. Although the working group made some preliminary suggestions as to the methodology for defining exploration areas and the duration of exploration contracts, it acknowledged that the matter would require further detailed consideration, particularly as the working group on the form of work plans had come to different conclusions on some aspects, such as the duration of exploration contracts. The findings and suggestions of the working groups on these matters are contained in ISBA/10/LTC/CRP.1. For the purposes of preparing a consolidated draft of the regulations, and so as not to pre-empt discussions within the Commission, the Secretariat has included in the draft the model clauses on the size of areas as suggested in ISBA/7/C/2.

2. Application of the site-banking system

12. Model clauses 4 and 6 in ISBA/7/C/2 provided for a system whereby the Authority could be given the opportunity to participate in the development of the resources by achieving equity participation in a mining operation. At the election of the contractor, equity participation would be granted in lieu of contributing a reserved area for the Authority. Equity participation in this manner is a practice which is by no means uncommon in land-based mining and offshore petroleum exploitation operations. The application of such a scheme would give meaning to the parallel system and would enable the Authority to participate effectively in future exploitation. It would also be consistent with the principles contained in the 1994 Agreement. Under this scheme, each applicant, at the time of submitting an

application for approval of a plan of work, would be required to make an election, either to provide a reserved area or, in lieu thereof, to offer to the Authority an equity interest in a joint venture arrangement. Such a joint venture arrangement would commence from the time of exploitation and would be subject to negotiation, based on certain parameters to be set out in the regulations. Such parameters would include a minimum guaranteed equity participation with the opportunity for the Authority to obtain up to a 50 per cent equity participation on the basis of *pari passu* treatment with the applicant.

13. The informal working group on this aspect of the regulations was of the view that site-banking would be difficult to apply to polymetallic sulphides and cobalt-rich crusts. Therefore, other alternatives suitable for reflecting the spirit of the parallel system as referred to in the Convention were examined, in recognition of the fact that both these resources were the common heritage of mankind. The group considered, however, that the option of contributing a reserved area should remain, in the event that it could be useful in the future. The working group suggested that the applicant could propose one of three options to the Authority, including the option to contribute a reserved area, a joint venture system involving a contract between the Enterprise and the contractor whereby the Enterprise would be offered up to 50 per cent of the equity participation, such participation being a carried interest, a free carried interest or a combination of both, or a production-sharing contract whereby the contractor would recover its cost of production each year and profit-sharing would be carried out on a 50:50 basis. The working group offered for the consideration of the Commission a revision of the model clauses reflecting the tentative proposals of the group (set out in ISBA/10/LTC/CRP.1), recognizing that these proposals would need to be further developed. It is suggested that the Commission may wish to give further detailed consideration to the proposals made by the informal working group, including whether it is realistic to provide for the option of production-sharing in the light of the profound uncertainties that exist in relation to potential future exploitation of minerals from these resources.

3. Environmental issues

14. The informal working group on environmental issues produced a preliminary draft of regulations relating to the protection and preservation of the marine environment during prospecting and exploration. The working group pointed out that, in developing environmental regulations relating to nodule exploration, the Commission had been dealing with a "post facto" situation. This was not the case with respect to the crusts and sulphides and, given the lack of scientific information on these deposits, the Commission had some scope for reviewing the obligations to be placed on contractors in relation to the protection and preservation of the marine environment. The group also considered that it was appropriate in this context to reflect in the draft regulations the developments in international environmental law achieved since the adoption of the Convention in 1982. The proposals made by the working group have been incorporated in the draft regulations in the annex to the present document and may be considered in more detail by the Commission as a whole.

Notes

¹ ISBA/4/A/18; reproduced in *Selected Decisions* 6, p. 31.

² ISBA/4/A/18; reproduced in *Selected Decisions* 4, p. 64.

³ The papers presented at the seminar were published as ISA Technical Study No. 2 (2002).

⁴ ISBA/8/C/6.

Annex

Draft regulations on prospecting and exploration for polymetallic sulphides and cobalt-rich ferromanganese crusts in the Area

Preamble

In accordance with the United Nations Convention on the Law of the Sea ("the Convention"), the seabed and ocean floor and the subsoil thereof beyond the limits of national jurisdiction, as well as its resources, are the common heritage of mankind, the exploration and exploitation of which shall be carried out for the benefit of mankind as a whole, on whose behalf the International Seabed Authority acts. The objective of this set of Regulations is to provide for prospecting and exploration for polymetallic sulphides and cobalt-rich ferromanganese crusts.

Part I

Introduction

Regulation 1

Use of terms and scope

1. Terms used in the Convention shall have the same meaning in these Regulations.
2. In accordance with the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, the provisions of the Agreement and Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 shall be interpreted and applied together as a single instrument. These Regulations and references in these Regulations to the Convention are to be interpreted and applied accordingly.
3. For the purposes of these Regulations:
 - (a) "block" means the seabed and subsoil of the Area that lies under a grid laid over the surface of the Area constituted by:
 - (i) lines running along meridians drawn through each degree of longitude and the minutes or fractions thereof between those degrees; and
 - (ii) lines running along parallels drawn through each degree of latitude and the minutes or fractions thereof between those degrees.
 - (b) "cobalt crusts" means oxidized deposits of cobalt-rich ferromanganese crust formed from direct precipitation of minerals from seawater onto hard substrates containing concentrations of cobalt, manganese, iron, other metals and rare earth elements;
 - (c) "exploitation" means the recovery for commercial purposes of polymetallic sulphides and cobalt crusts in the Area and the extraction of minerals therefrom, including the construction and operation of mining, processing and transportation systems, for the production and marketing of metals;

(d) "exploration" means searching for deposits of polymetallic sulphides and cobalt crusts in the Area with exclusive rights, the analysis of such deposits, the use and testing of recovery systems and equipment, processing facilities and transportation systems, and the carrying out of studies of the environmental, technical, economic, commercial and other appropriate factors that must be taken into account in exploitation;

(e) "marine environment" includes the physical, chemical, geological and biological components, conditions and factors which interact and determine the productivity, state, condition and quality of the marine ecosystem, the waters of the seas and oceans and the airspace above those waters, as well as the seabed and ocean floor and subsoil thereof;

(f) "polymetallic sulphides" means hydrothermally formed deposits of sulphide minerals which contain concentrations of metals including, inter alia, cobalt, copper, lead, nickel, zinc, gold, and silver;

(g) "prospecting" means the search for deposits of polymetallic sulphides and cobalt crusts in the Area, including estimation of the composition, sizes and distributions of deposits of polymetallic sulphides and cobalt crusts and their economic values, without any exclusive rights;

(h) "serious harm to the marine environment" means any effect from activities in the Area on the marine environment which represents a significant adverse change in the marine environment determined according to the rules, regulations and procedures adopted by the Authority on the basis of internationally recognized standards and practices.

4. These Regulations shall not in any way affect the freedom of scientific research, pursuant to article 87 of the Convention, or the right to conduct marine scientific research in the Area pursuant to articles 143 and 256 of the Convention. Nothing in these Regulations shall be construed in such a way as to restrict the exercise by States of the freedom of the high seas as reflected in article 87 of the Convention.

5. These Regulations may be supplemented by further rules, regulations and procedures, in particular on the protection and preservation of the marine environment. These Regulations shall be subject to the provisions of the Convention and the Agreement and other rules of international law not incompatible with the Convention.

Part II Prospecting

Regulation 2 Prospecting

1. Prospecting shall be conducted in accordance with the Convention and these Regulations and may commence only after the prospector has been informed by the Secretary-General that its notification has been recorded pursuant to regulation 4, paragraph 2.

2. Prospecting shall not be undertaken if substantial evidence indicates the risk of serious harm to the marine environment.
3. Prospecting shall not be undertaken in an area covered by an approved plan of work for exploration for polymetallic sulphides and cobalt crusts or in a reserved area; nor may there be prospecting in an area which the Council has disapproved for exploitation because of the risk of serious harm to the marine environment.
4. Prospecting may be undertaken in an area covered by an approved plan of work for exploration for or exploitation of other resources, provided that such prospecting does not cause undue interference with activities under such an approved plan of work.
5. Prospecting shall not confer on the prospector any rights with respect to resources. A prospector may, however, recover a reasonable quantity of minerals, being the quantity necessary for testing, and not for commercial use.
6. There shall be no time limit on prospecting except that prospecting in a particular area shall cease upon written notification to the prospector by the Secretary-General that a plan of work for exploration has been approved with regard to that area.
7. Prospecting may be conducted simultaneously by more than one prospector in the same area or areas.

Regulation 3

Notification of prospecting

1. A proposed prospector shall notify the Authority of its intention to engage in prospecting.
2. Each notification of prospecting shall be in the form prescribed in Annex 1 to these Regulations, addressed to the Secretary-General, and shall conform to the requirements of these Regulations.
3. Each notification shall be submitted:
 - (a) In the case of a State, by the authority designated for that purpose by it;
 - (b) In the case of an entity, by its designated representative;
 - (c) In the case of the Enterprise, by its competent authority.
4. Each notification shall be in one of the languages of the Authority and shall contain:
 - (a) The name, nationality and address of the proposed prospector and its designated representative;
 - (b) The coordinates of the broad area or areas within which prospecting is to be conducted, in accordance with the most recent generally accepted international standard used by the Authority;
 - (c) A general description of the prospecting programme, including the proposed date of commencement and its approximate duration;
 - (d) A satisfactory written undertaking that the proposed prospector will:

- (i) Comply with the Convention and the relevant rules, regulations and procedures of the Authority concerning:
 - a. Cooperation in the training programmes in connection with marine scientific research and transfer of technology referred to in articles 143 and 144 of the Convention; and
 - b. Protection and preservation of the marine environment;
- (ii) Accept verification by the Authority of compliance therewith; and
- (iii) Make available to the Authority, as far as practicable, such data as may be relevant to the protection and preservation of the marine environment.

Regulation 4

Consideration of notifications

1. The Secretary-General shall acknowledge in writing receipt of each notification submitted under regulation 3, specifying the date of receipt.
2. The Secretary-General shall review and act on the notification within 45 days of its receipt. If the notification conforms with the requirements of the Convention and these Regulations, the Secretary-General shall record the particulars of the notification in a register maintained for that purpose and shall inform the prospector in writing that the notification has been so recorded.
3. The Secretary-General shall, within 45 days of receipt of the notification, inform the proposed prospector in writing if the notification includes any part of an area included in an approved plan of work for exploration or exploitation of any category of resources, or any part of a reserved area, or any part of an area which has been disapproved by the Council for exploitation because of the risk of serious harm to the marine environment, or if the written undertaking is not satisfactory, and shall provide the proposed prospector with a written statement of reasons. In such cases, the proposed prospector may, within 90 days, submit an amended notification. The Secretary-General shall, within 45 days, review and act upon such amended notification.
4. A prospector shall inform the Secretary-General in writing of any change in the information contained in the notification.
5. The Secretary-General shall not release any particulars contained in the notification except with the written consent of the prospector. The Secretary-General shall, however, from time to time inform all members of the Authority of the identity of prospectors and the general areas in which prospecting is being conducted.

Regulation 5

Protection and preservation of the marine environment during prospecting

1. Each prospector shall take necessary measures to prevent, reduce and control pollution and other hazards to the marine environment arising from prospecting as far as reasonably possible using for this purpose the best practicable means at its disposal. In particular, each prospector shall minimize or eliminate:
 - (a) Adverse environmental impacts from prospecting; and

(b) Actual or potential conflicts or interference with existing or planned marine scientific research activities, in accordance with the guidelines set out in annex 5.

2. Prospectors shall cooperate with the Authority in the establishment and implementation of programmes for monitoring and evaluating the potential impacts of the exploration and exploitation of polymetallic sulphides and cobalt-rich crusts on the marine environment.

3. A prospector shall immediately notify the Secretary-General in writing, using the most effective means, of any incident arising from prospecting which poses a threat of serious or irreversible damage to the marine environment. Upon receipt of such notification the Secretary-General shall act in a manner consistent with regulation 35.

Regulation 6

Annual report

1. A prospector shall, within 90 days of the end of each calendar year, submit a report to the Authority on the status of prospecting. Such reports shall be submitted by the Secretary-General to the Legal and Technical Commission. Each such report shall contain:

(a) A general description of the status of prospecting and of the results obtained;

(b) Information on compliance with the undertakings referred to in regulation 3, paragraph (4) (d); and

(c) Information on compliance with the guidelines contained in annex 5.

2. If the prospector intends to claim expenditures for prospecting as part of the development costs incurred prior to the commencement of commercial production, the prospector shall submit an annual statement, in conformity with internationally accepted accounting principles and certified by a duly qualified firm of public accountants, of the actual and direct expenditures incurred by the prospector in carrying out prospecting.

Regulation 7

Confidentiality of data and information from prospecting contained in the annual report

1. The Secretary-General shall ensure the confidentiality of all data and information contained in the reports submitted under regulation 5 in accordance with the provisions of regulations 38 and 39, provided that data and information relating to environmental monitoring programmes shall not be considered confidential.

2. The Secretary-General may, at any time, with the consent of the prospector concerned, release data and information relating to prospecting in an area in respect of which a notification has been submitted. If the Secretary-General determines that the prospector no longer exists or cannot be located, the Secretary-General may release such data and information.

Regulation 8

Objects of an archaeological or historical nature

A prospector shall immediately notify the Secretary-General in writing of any finding in the Area of an object of an archaeological or historical nature and its location. The Secretary-General shall transmit such information to the Director-General of the United Nations Educational, Scientific and Cultural Organization.

Part III

Applications for approval of plans of work for exploration in the form of contracts

Section 1

General provisions

Regulation 9

General

Subject to the provisions of the Convention, the following may apply to the Authority for approval of plans of work for exploration:

- (a) The Enterprise, on its own behalf or in a joint arrangement;
- (b) States Parties, state enterprises or natural or juridical persons which possess the nationality of States or are effectively controlled by them or their nationals, when sponsored by such States, or any group of the foregoing which meets the requirements of these Regulations.

Section 2

Content of applications

Regulation 10

Form of applications

1. Each application for approval of a plan of work for exploration shall be in the form prescribed in Annex 2 to these Regulations, shall be addressed to the Secretary-General, and shall conform to the requirements of these Regulations.
2. Each application shall be submitted:
 - (a) In the case of a State, by the authority designated for that purpose by it;
 - (b) In the case of an entity, by its designated representative or the authority designated for that purpose by the sponsoring State or States; and
 - (c) In the case of the Enterprise, by its competent authority.
3. Each application by a state enterprise or one of the entities referred to in subparagraph (b) of regulation 9 shall also contain:
 - (a) Sufficient information to determine the nationality of the applicant or the identity of the State or States by which, or by whose nationals, the applicant is effectively controlled; and

(b) The principal place of business or domicile and, if applicable, place of registration of the applicant.

4. Each application submitted by a partnership or consortium of entities shall contain the required information in respect of each member of the partnership or consortium.

Regulation 11

Certificate of sponsorship

1. Each application by a state enterprise or one of the entities referred to in subparagraph (b) of regulation 9 shall be accompanied by a certificate of sponsorship issued by the State of which it is a national or by which or by whose nationals it is effectively controlled. If the applicant has more than one nationality, as in the case of a partnership or consortium of entities from more than one State, each State involved shall issue a certificate of sponsorship.

2. Where the applicant has the nationality of one State but is effectively controlled by another State or its nationals, each State involved shall issue a certificate of sponsorship.

3. Each certificate of sponsorship shall be duly signed on behalf of the State by which it is submitted and shall contain:

- (a) The name of the applicant;
- (b) The name of the sponsoring State;
- (c) A statement that the applicant is:
 - (i) A national of the sponsoring State; or
 - (ii) Subject to the effective control of the sponsoring State or its nationals;
- (d) A statement by the sponsoring State that it sponsors the applicant;
- (e) The date of deposit by the sponsoring State of its instrument of ratification of, or accession or succession to, the Convention;
- (f) A declaration that the sponsoring State assumes responsibility in accordance with article 139, article 153, paragraph 4, and annex III, article 4, paragraph 4, of the Convention.

4. States or entities in a joint arrangement with the Enterprise shall also comply with this regulation.

Regulation 12

Total area covered by the application

1. The area covered by each application for approval of a plan of work for exploration shall be comprised of one or more blocks. Each block shall cover a total area not exceeding 150 square kilometres and shall be defined by a list of coordinates in accordance with the most recent generally accepted international standard used by the Authority.

2. The total area covered by an application for approval of a plan of work for exploration in respect of polymetallic sulphides shall not exceed 200 blocks or 30,000 square kilometres, whichever is less, of which no more than 6,000 square

kilometres shall consist of contiguous blocks. For the purposes of this regulation, two blocks that touch at any point shall be considered to be a contiguous block.

3. The total area covered by an application for approval of a plan of work for exploration in respect of cobalt crusts shall not exceed 40 blocks or 6,000 square kilometres, whichever is less.

4. The total area covered by applications by affiliated applicants shall not exceed the limitations set out in paragraphs 2 and 3 of this regulation. For the purposes of this regulation, an applicant is affiliated with another applicant if an applicant is, directly or indirectly, controlling, controlled by or under common control with, another applicant.

Regulation 13

Financial and technical capabilities

1. Each application for approval of a plan of work for exploration shall contain specific and sufficient information to enable the Council to determine whether the applicant is financially and technically capable of carrying out the proposed plan of work for exploration and of fulfilling its financial obligations to the Authority.

2. An application for approval of a plan of work for exploration by the Enterprise shall include a statement by its competent authority certifying that the Enterprise has the necessary financial resources to meet the estimated costs of the proposed plan of work for exploration.

3. An application for approval of a plan of work for exploration by a State or a state enterprise shall include a statement by the State or the sponsoring State certifying that the applicant has the necessary financial resources to meet the estimated costs of the proposed plan of work for exploration.

4. An application for approval of a plan of work for exploration by an entity shall include copies of its audited financial statements, including balance sheets and profit-and-loss statements, for the most recent three years, in conformity with internationally accepted accounting principles and certified by a duly qualified firm of public accountants; and

(a) If the applicant is a newly organized entity and a certified balance sheet is not available, a pro forma balance sheet certified by an appropriate official of the applicant;

(b) If the applicant is a subsidiary of another entity, copies of such financial statements of that entity and a statement from that entity, in conformity with internationally accepted accounting principles and certified by a duly qualified firm of public accountants, that the applicant will have the financial resources to carry out the plan of work for exploration;

(c) If the applicant is controlled by a State or a state enterprise, a statement from the State or state enterprise certifying that the applicant will have the financial resources to carry out the plan of work for exploration.

5. Where an applicant referred to in paragraph 4 intends to finance the proposed plan of work for exploration by borrowings, its application shall include the amount of such borrowings, the repayment period and the interest rate.

6. Each application shall include:

(a) A general description of the applicant's previous experience, knowledge, skills, technical qualifications and expertise relevant to the proposed plan of work for exploration;

(b) A general description of the equipment and methods expected to be used in carrying out the proposed plan of work for exploration and other relevant non-proprietary information about the characteristics of such technology;

(c) Curricula vitae of the senior managers and key technical personnel expected to be employed in carrying out the proposed plan of work for exploration; and

(d) A general description of the applicant's financial and technical capability to respond to any incident or activity which causes serious harm to the marine environment.

7. Where the applicant is a partnership or consortium of entities in a joint arrangement, each member of the partnership or consortium shall provide the information required by this regulation.

Regulation 14

Previous contracts with the Authority

Where the applicant or, in the case of an application by a partnership or consortium of entities in a joint arrangement, any member of the partnership or consortium, has previously been awarded any contract with the Authority, the application shall include:

(a) The date of the previous contract or contracts;

(b) The dates, reference numbers and titles of each report submitted to the Authority in connection with the contract or contracts; and

(c) The date of termination of the contract or contracts, if applicable.

Regulation 15

Undertakings

Each applicant, including the Enterprise, shall, as part of its application for approval of a plan of work for exploration, provide a written undertaking to the Authority that it will:

(a) Accept as enforceable and comply with the applicable obligations created by the provisions of the Convention and the rules, regulations and procedures of the Authority, the decisions of the organs of the Authority and the terms of its contracts with the Authority;

(b) Accept control by the Authority of activities in the Area, as authorized by the Convention; and

(c) Provide the Authority with a written assurance that its obligations under the contract will be fulfilled in good faith.

Regulation 16

Applicant's election of a reserved area contribution or joint venture participation

Each applicant shall, in the application, elect either:

- (a) To contribute a reserved area to carry out activities pursuant to Annex III, article 9, of the Convention, in accordance with regulation 17;
- (b) To offer an equity interest in a joint venture arrangement in accordance with regulation 19; or
- (c) To enter into a production-sharing contract in accordance with regulation 19.

Regulation 17

Data and information to be submitted before the designation of a reserved area

1. Where the applicant elects to contribute a reserved area, the area covered by the application shall be sufficiently large and of sufficient estimated commercial value to allow two mining operations. The applicant shall divide the blocks comprising the application into two groups, which need not be composed of contiguous blocks, of equal estimated commercial value. The area to be allocated to the applicant shall be subject to the provisions of regulation 27.
2. Each such application shall contain sufficient data and information, as prescribed in section III of annex 2 to these Regulations, with respect to the area under application to enable the Council, on the recommendation of the Legal and Technical Commission, to designate a reserved area based on the estimated commercial value of each part. Such data and information shall consist of data available to the applicant with respect to both parts of the area under application, including the data used to determine their commercial value.
3. The Council, on the basis of the data and information submitted by the applicant pursuant to section III of annex 2 to these Regulations, if found satisfactory, and taking into account the recommendation of the Legal and Technical Commission, shall designate the part of the area under application which is to be a reserved area. The area so designated shall become a reserved area as soon as the plan of work for exploration for the non-reserved area is approved and the contract is signed. If the Council determines that additional information, consistent with these Regulations and annex 2, is needed to designate the reserved area, it shall refer the matter back to the Commission for further consideration, specifying the additional information required.
4. Once the plan of work for exploration is approved and a contract has been issued, the data and information transferred to the Authority by the applicant in respect of the reserved area may be disclosed by the Authority in accordance with article 14, paragraph 3, of annex III to the Convention.

Regulation 18

Applications for approval of plans of work with respect to a reserved area

1. Any State which is a developing State or any natural or juridical person sponsored by it and effectively controlled by it or by any other developing State, or any group of the foregoing, may notify the Authority that it wishes to submit a plan of work for exploration with respect to a reserved area. The Secretary-General shall

forward such notification to the Enterprise, which shall inform the Secretary-General in writing within six months whether or not it intends to carry out activities in that area. If the Enterprise intends to carry out activities in that area, it shall, pursuant to paragraph 4, also inform the contractor whose application for approval of a plan of work for exploration originally included that area in writing.

2. An application for approval of a plan of work for exploration in respect of a reserved area may be submitted at any time after such an area becomes available following a decision by the Enterprise that it does not intend to carry out activities in that area or where the Enterprise has not, within six months of the notification by the Secretary-General, either taken a decision on whether it intends to carry out activities in that area or notified the Secretary-General in writing that it is engaged in discussions regarding a potential joint venture. In the latter instance, the Enterprise shall have one year from the date of such notification in which to decide whether to conduct activities in that area.

3. If the Enterprise or a developing State or one of the entities referred to in paragraph 1 does not submit an application for approval of a plan of work for exploration for activities in a reserved area within 15 years of the commencement by the Enterprise of its functions independent of the Secretariat of the Authority or within 15 years of the date on which that area is reserved for the Authority, whichever is the later, the contractor whose application for approval of a plan of work for exploration originally included that area shall be entitled to apply for a plan of work for exploration for that area provided it offers in good faith to include the Enterprise as a joint-venture partner.

4. A contractor has the right of first refusal to enter into a joint venture arrangement with the Enterprise for exploration of the area which was included in its application for approval of a plan of work for exploration and which was designated by the Council as a reserved area.

Regulation 19

Joint venture participation

1. Where the applicant elects to offer an equity interest in a joint venture arrangement or a production-sharing contract, it shall submit data and information in accordance with regulation 20. The area to be allocated to the applicant shall be subject to the provisions of regulation 27.

2. The joint venture arrangement, which shall take effect at the time the applicant applies for a contract for exploitation, shall include the following:

(a) The applicant shall offer the Enterprise the opportunity to obtain 50 per cent of the equity participation in the joint venture arrangement on the basis of *pari passu* treatment with the applicant for all purposes;

(b) In the event that the Enterprise elects not to accept 50 per cent of such equity participation, the Enterprise may obtain a lesser percentage on the basis of *pari passu* treatment with the applicant for all purposes for such lesser participation;

(c) In any event, the Enterprise shall obtain a minimum of 20 per cent of such equity participation on the following basis:

(i) Half of such equity participation shall be obtained without payment, directly or indirectly, to the applicant and shall be treated *pari passu* for all purposes with the equity participation of the applicant;

(ii) The remainder of such equity participation shall be treated *pari passu* for all purposes with the equity participation of the applicant, except that the Enterprise shall not receive any profit distribution with respect to such participation until the applicant has recovered its total equity participation in the joint venture arrangement;

(d) Except as specifically provided in the agreement between the applicant and the Enterprise, the Enterprise shall not by reason of its equity participation be otherwise obligated to provide funds or credits or issue guarantees or otherwise accept any financial liability whatsoever for or on behalf of the joint venture arrangement, nor shall the Enterprise be required to subscribe for additional equity participation so as to maintain its proportionate participation in the joint venture arrangement.

3. A production-sharing contract shall include a requirement that the applicant will be responsible for all the management and execution of the operations during the exploration phase with its own capital, manpower, technology and equipment at its sole risk and cost. During the exploitation phase, the applicant is entitled to recover all its cost. Thereafter, profits will be split on a 50:50 basis between the applicant and the Enterprise.

Regulation 20

Data and information to be submitted for approval of the plan of work for exploration

1. Each applicant shall submit, with a view to receiving approval of the plan of work for exploration in the form of a contract, the following information:

(a) A general description and a schedule of the proposed exploration programme, including the programme of activities for the immediate five-year period, such as studies to be undertaken in respect of the environmental, technical, economic and other appropriate factors that must be taken into account in exploration;

(b) A description of the programme for oceanographic and environmental baseline studies in accordance with these Regulations and any environmental rules, regulations and procedures established by the Authority that would enable an assessment of the potential environmental impact of the proposed exploration activities, taking into account any recommendations issued by the Legal and Technical Commission;

(c) A preliminary assessment of the possible impact of the proposed exploration activities on the marine environment;

(d) A description of proposed measures for the prevention, reduction and control of pollution and other hazards, as well as possible impacts, to the marine environment;

(e) Data necessary for the Council to make the determination it is required to make in accordance with regulation 13, paragraph 1; and

(f) A schedule of anticipated yearly expenditures in respect of the programme of activities for the immediate five-year period.

2. Where the applicant elects to contribute a reserved area, such data and information shall be submitted by the applicant after the Council has designated the reserved area in accordance with regulation 17, paragraph 3.

3. Where the applicant elects to offer an equity interest in a joint venture arrangement or enter into a production-sharing contract, such data and information shall be submitted by the applicant at the time of the election.

Section 3

Fees

Regulation 21

Fee for applications

1. The fee for processing applications for approval of a plan of work for exploration shall be US\$ 250,000 or its equivalent in a freely convertible currency. The fee shall be paid to the Authority by the applicant at the time of submitting an application.

2. The amount of the fee shall be reviewed from time to time by the Council in order to ensure that it covers the administrative costs incurred by the Authority in processing the application.

3. If the administrative costs incurred by the Authority in processing the application are less than the fixed amount, the Authority shall refund the difference to the applicant.

Section 4

Processing of applications

Regulation 22

Receipt, acknowledgement and safe custody of applications

1. The Secretary-General shall:

(a) Acknowledge in writing receipt of every application for approval of a plan of work for exploration submitted under this Part, specifying the date of receipt and the election made pursuant to regulation 16;

(b) Place the application together with the attachments and annexes thereto in safe custody and ensure the confidentiality of all confidential data and information contained in the application; and

(c) Notify the members of the Authority of the receipt of such application and circulate to them information of a general nature which is not confidential regarding the application.

Regulation 23

Consideration by the Legal and Technical Commission

1. Upon receipt of an application for approval of a plan of work for exploration, the Secretary-General shall notify the members of the Legal and Technical Commission and place consideration of the application as an item on the agenda for the next meeting of the Commission.
2. The Commission shall examine applications in the order in which they are received.
3. The Commission shall determine if the applicant:
 - (a) Has complied with the provisions of these Regulations;
 - (b) Has given the undertakings and assurances specified in regulation 15;
 - (c) Possesses the financial and technical capability to carry out the proposed plan of work for exploration; and
 - (d) Has satisfactorily discharged its obligations in relation to any previous contract with the Authority.
4. The Commission shall, in accordance with the requirements set forth in these Regulations and its procedures, determine whether the proposed plan of work for exploration will:
 - (a) Provide for effective protection of human health and safety;
 - (b) Provide for effective protection and preservation of the marine environment;
 - (c) Ensure that installations are not established where interference may be caused to the use of recognized sea lanes essential to international navigation or in areas of intense fishing activity.
5. If the Commission makes the determinations specified in paragraph 3 and determines that the proposed plan of work for exploration meets the requirements of paragraph 4, the Commission shall recommend approval of the plan of work for exploration to the Council.
6. The Commission shall not recommend approval of the plan of work for exploration if part or all of the area covered by the proposed plan of work for exploration is included in:
 - (a) A plan of work for exploration approved by the Council for polymetallic sulphides and cobalt crusts; or
 - (b) A plan of work approved by the Council for exploration for or exploitation of other resources if such proposed plan of work for exploration for polymetallic sulphides and cobalt crusts might cause undue interference with activities under such an approved plan of work for such other resources; or
 - (c) An area disapproved for exploitation by the Council in cases where substantial evidence indicates the risk of serious harm to the marine environment.
7. Except in the case of applications by the Enterprise, on its own behalf or in a joint venture, and applications under regulation 18, the Commission shall not recommend approval of the plan of work for exploration if part or all of the area

covered by the proposed plan of work for exploration is included in a reserved area or an area designated by the Council to be a reserved area.

8. If the Commission finds that an application does not comply with these Regulations, or if the application covers part or all of the area covered by a pending application previously submitted by a different applicant, it shall notify the applicant in writing, through the Secretary-General, indicating the reasons. The applicant may, within 60 days of such notification, amend its application. If the Commission after further consideration is of the view that it should not recommend approval of the plan of work for exploration, it shall so inform the applicant and provide the applicant with a further opportunity to make representations within 30 days of such information. The Commission shall consider any such representations made by the applicant in preparing its report and recommendation to the Council.

9. In considering a proposed plan of work for exploration, the Commission shall have regard to the principles, policies and objectives relating to activities in the Area as provided for in Part XI and annex III of the Convention and the Agreement.

10. The Commission shall consider applications expeditiously and shall submit its report and recommendations to the Council on the designation of the areas and on the plan of work for exploration at the first possible opportunity, taking into account the schedule of meetings of the Authority.

11. In discharging its duties, the Commission shall apply these Regulations and the rules, regulations and procedures of the Authority in a uniform and non-discriminatory manner.

Regulation 24

Consideration and approval of plans of work for exploration by the Council

1. The Council shall consider the reports and recommendations of the Commission relating to approval of plans of work for exploration in accordance with paragraphs 11 and 12 of section 3 of the annex to the Agreement.

2. If the Commission has made recommendations for the approval of applications in the same area or areas by more than one applicant, the Council shall so notify such applicants and the applicants may, within 45 days of such notification, amend their applications so as to resolve conflicts with respect to such applications. If such conflicts are not resolved within said period, the Council shall determine the area or areas to be allocated to each applicant on an equitable and non-discriminatory basis.

Part IV

Contracts for exploration

Regulation 25

The contract

1. After a plan of work for exploration has been approved by the Council, it shall be prepared in the form of a contract between the Authority and the applicant as prescribed in Annex 3 to these Regulations. Each contract shall incorporate the standard clauses set out in Annex 4 in effect at the date of entry into force of the contract.

2. The contract shall be signed by the Secretary-General on behalf of the Authority and by the applicant. The Secretary-General shall notify all members of the Authority in writing of the conclusion of each contract.

3. In accordance with the principle of non-discrimination, a contract with a State or entity shall be similar to and no less favourable than those agreed with any other contractors.

Regulation 26

Rights of the contractor

1. The contractor shall have the exclusive right to explore an area covered by a plan of work for exploration in respect of polymetallic sulphides and cobalt crusts. The Authority shall ensure that no other entity operates in the same area for resources other than polymetallic sulphides and cobalt crusts in a manner that might interfere with the operations of the contractor.

2. A contractor who has an approved plan of work for exploration only shall have a preference and a priority among applicants submitting plans of work for exploitation of the same area and resources. Such preference or priority may be withdrawn by the Council if the contractor has failed to comply with the requirements of its approved plan of work for exploration within the time period specified in a written notice or notices from the Council to the contractor indicating which requirements have not been complied with by the contractor. The time period specified in any such notice shall not be unreasonable. The contractor shall be accorded a reasonable opportunity to be heard before the withdrawal of such preference or priority becomes final. The Council shall provide the reasons for its proposed withdrawal of preference or priority and shall consider any contractor's response. The decision of the Council shall take account of that response and shall be based on substantial evidence.

3. A withdrawal of preference or priority shall not become effective until the contractor has been accorded a reasonable opportunity to exhaust the judicial remedies available to it pursuant to Part XI, section 5, of the Convention.

Regulation 27

Size of area and relinquishment

1. In the case of a contract for exploration for polymetallic sulphides, the total number of blocks allocated to the contractor shall not exceed 200. The contractor shall relinquish the blocks allocated to it in accordance with paragraphs 2, 3 and 4 of this regulation.

2. At the end of the fifth year from the date of the contract, the contractor shall relinquish:

(a) 50 per cent of the number of blocks allocated to it; or

(b) If 50 per cent of that number of blocks is a whole number and a fraction, the next higher whole number of the blocks.

3. At the end of the tenth year from the date of the contract, the contractor shall relinquish:

(a) An additional 25 per cent of the number of blocks allocated to it; or

(b) If 25 per cent of that number of blocks is a whole number and a fraction, the next higher whole number of the blocks.

4. At the end of the fifteenth year from the date of the contract, or when the contractor applies for exploitation rights, whichever is the earlier, the contractor shall nominate 25 blocks from the remaining number of blocks allocated to it, which shall be retained by the contractor. The remaining blocks shall be relinquished.

5. In the case of a contract for exploration for cobalt crusts, the total number of blocks allocated to the contractor shall not exceed 40. The contractor shall relinquish the blocks allocated to it in accordance with paragraphs 6, 7 and 8 of this regulation.

6. At the end of the third year from the date of the contract, the contractor shall relinquish:

(a) 20 per cent of the number of blocks allocated to it; or

(b) If 20 per cent of that number of blocks is a whole number and a fraction, the next higher whole number of the blocks.

7. At the end of the fifth year from the date of the contract, the contractor shall relinquish:

(a) An additional 10 per cent of the number of blocks allocated to it; or

(b) If 10 per cent of that number of blocks is a whole number and a fraction, the next higher whole number of the blocks.

8. At the end of the eighth year from the date of the contract, the contractor shall relinquish an additional 20 per cent of the number of blocks allocated to it or such larger amount as would exceed the exploitation area decided upon by the Authority.

9. Relinquished blocks shall revert to the Area.

10. The Council may, at the request of the contractor, and on the recommendation of the Commission, in exceptional circumstances, defer the schedule of relinquishment. Such exceptional circumstances shall be determined by the Council and shall include, inter alia, consideration of prevailing economic circumstances or other unforeseen exceptional circumstances arising in connection with the operational activities of the Contractor.

Regulation 28

Duration of contracts

1. A plan of work for exploration shall be approved for a period of 15 years. Upon expiration of a plan of work for exploration, the contractor shall apply for a plan of work for exploitation unless the contractor has already done so, has obtained an extension for the plan of work for exploration or decides to renounce its rights in the area covered by the plan of work for exploration.

2. Not later than six months before the expiration of a plan of work for exploration, a contractor may apply for extensions for the plan of work for exploration for periods of not more than five years each. Such extensions shall be approved by the Council, on the recommendation of the Commission, if the contractor has made efforts in good faith to comply with the requirements of the plan of work but for reasons beyond the contractor's control has been unable to

complete the necessary preparatory work for proceeding to the exploitation stage or if the prevailing economic circumstances do not justify proceeding to the exploitation stage.

Regulation 29 **Training**

Pursuant to article 15 of annex III to the Convention, each contract shall include as a schedule a practical programme for the training of personnel of the Authority and developing States and drawn up by the contractor in cooperation with the Authority and the sponsoring State or States. Training programmes shall focus on training in the conduct of exploration, and shall provide for full participation by such personnel in all activities covered by the contract. Such training programmes may be revised and developed from time to time as necessary by mutual agreement.

Regulation 30 **Periodic review of the implementation of the plan of work for exploration**

1. The contractor and the Secretary-General shall jointly undertake a periodic review of the implementation of the plan of work for exploration at intervals of five years. The Secretary-General may request the contractor to submit such additional data and information as may be necessary for the purposes of the review.
2. In the light of the review, the contractor shall indicate its programme of activities for the following five-year period, making such adjustments to its previous programme of activities as are necessary.
3. The Secretary-General shall report on the review to the Commission and to the Council. The Secretary-General shall indicate in the report whether any observations transmitted to him by States Parties to the Convention concerning the manner in which the contractor has discharged its obligations under these Regulations relating to the protection and preservation of the marine environment were taken into account in the review.

Regulation 31 **Termination of sponsorship**

1. Each contractor shall have the required sponsorship throughout the period of the contract.
2. If a State terminates its sponsorship it shall promptly notify the Secretary-General in writing. The sponsoring State should also inform the Secretary-General of the reasons for terminating its sponsorship. Termination of sponsorship shall take effect six months after the date of receipt of the notification by the Secretary-General, unless the notification specifies a later date.
3. In the event of termination of sponsorship the contractor shall, within the period referred to in paragraph 2, obtain another sponsor. Such sponsor shall submit a certificate of sponsorship in accordance with regulation 11. Failure to obtain a sponsor within the required period shall result in the termination of the contract.
4. A sponsoring State shall not be discharged by reason of the termination of its sponsorship from any obligations accrued while it was a sponsoring State, nor shall

such termination affect any legal rights and obligations created during such sponsorship.

5. The Secretary-General shall notify the members of the Authority of the termination or change of sponsorship.

Regulation 32

Responsibility and liability

Responsibility and liability of the contractor and of the Authority shall be in accordance with the Convention. The contractor shall continue to have responsibility for any damage arising out of wrongful acts in the conduct of its operations, in particular damage to the marine environment, after the completion of the exploration phase.

Part V

Protection and preservation of the marine environment

Regulation 33

Protection and preservation of the marine environment

1. The Authority shall, in accordance with the Convention and the Agreement, establish and keep under periodic review environmental rules, regulations and procedures to ensure effective protection for the marine environment from harmful effects which may arise from activities in the Area.

2. In order to ensure effective protection for the marine environment from harmful effects which may arise from activities in the Area, the Authority and sponsoring States shall apply a precautionary approach, as reflected in principle 15 of the Rio Declaration,¹ to such activities. The Legal and Technical Commission shall make recommendations to the Council on the implementation of this paragraph.

3. Pursuant to article 145 of the Convention and paragraph 2 of this regulation, each contractor shall take necessary measures to prevent, reduce and control pollution and other hazards to the marine environment arising from its activities in the Area using for this purpose the best practicable means at its disposal.

4. Contractors, sponsoring States and other interested States or entities shall cooperate with the Authority in the establishment and implementation of programmes for monitoring and evaluating the impacts of deep seabed mining on the marine environment. Such programmes may include proposals for areas to be set aside and used exclusively as impact reference zones and preservation reference zones. "Impact reference zones" means areas to be used for assessing the effect of activities in the Area on the marine environment and which are representative of the environmental characteristics of the exploration area. "Preservation reference zones" means areas in which no mining shall occur to ensure representative and stable biota of the seabed in order to assess any changes in the flora and fauna of the marine environment.

¹ *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992* (United Nations publication, Sales No. E.93.I.8 and corrigenda), vol. I: *Resolutions adopted by the Conference, resolution 1, annex I.*

Regulation 34**Environmental baselines and monitoring**

1. Each contract shall require the contractor to gather environmental baseline data and to establish environmental baselines, taking into account any recommendations issued by the Legal and Technical Commission pursuant to regulation 41, against which to assess the likely effects of its programme of activities under the plan of work for exploration of the marine environment and a programme to monitor and report on such effects. The recommendations issued by the Commission may, inter alia, list those exploration activities which may be considered to have no potential for causing harmful effects on the marine environment. The contractor shall cooperate with the Authority and the sponsoring State or States in the establishment and implementation of such monitoring programme.
2. The contractor shall report annually in writing to the Secretary-General on the implementation and results of the monitoring programme referred to in paragraph 1 and shall submit data and information, taking into account any recommendations issued by the Commission pursuant to regulation 41.
3. Pursuant to article 165 of the Convention, the reports referred to in paragraph 2, together with such other environmental data and information as the Commission may require in order to carry out its functions, shall be transmitted to the Commission for its consideration.

Regulation 35**Emergency orders**

1. When the Secretary-General has been notified by a contractor or otherwise becomes aware of an incident resulting from or caused by a contractor's activities in the Area that poses a threat of serious or irreversible damage to the marine environment, the Secretary-General shall cause a general notification of the incident to be issued, shall notify in writing the contractor and the sponsoring State or States, and shall report immediately to the Legal and Technical Commission and to the Council. A copy of the report shall be circulated to all members of the Authority, to competent international organizations and to concerned subregional, regional and global organizations and bodies. The Secretary-General shall monitor developments with respect to all such incidents and shall report on them as appropriate to the Commission and to the Council.
2. Pending any action by the Council, the Secretary-General shall take such immediate measures of a temporary nature as are practical and reasonable in the circumstances to prevent, contain and minimize the threat of serious or irreversible damage to the marine environment. Such temporary measures shall remain in effect for no longer than 90 days, or until the Council decides what measures, if any, to take pursuant to paragraph 5 of this regulation, whichever is the earlier.
3. After having received the report of the Secretary-General, the Commission shall determine, based on the evidence provided to it and taking into account the measures already taken by the contractor, which measures are necessary to respond effectively to the incident in order to prevent, contain and minimize the threat of serious or irreversible damage to the marine environment, and shall make its recommendations to the Council.
4. The Council shall consider the recommendations of the Commission.

5. The Council, taking into account the recommendations of the Commission and any information provided by the Contractor, may issue emergency orders, which may include orders for the suspension or adjustment of operations, as may be reasonably necessary to prevent, contain and minimize the threat of serious or irreversible damage to the marine environment arising out of activities in the Area.

6. If a contractor does not promptly comply with an emergency order to prevent a threat of serious or irreversible damage to the marine environment arising out of its activities in the Area, the Council shall take by itself or through arrangements with others on its behalf, such practical measures as are necessary to prevent, contain and minimize any such serious harm to the marine environment.

7. In order to enable the Council, when necessary, to take immediately the practical measures to prevent, contain and minimize the threat of serious or irreversible damage to the marine environment referred to in paragraph 6, the contractor, prior to the commencement of testing of collecting systems and processing operations, will provide the Council with a guarantee of its financial and technical capability to comply promptly with emergency orders or to assure that the Council can take such emergency measures. If the contractor does not provide the Council with such a guarantee, the sponsoring State or States shall, in response to a request by the Secretary-General and pursuant to articles 139 and 235 of the Convention, take necessary measures to ensure that the contractor provides such a guarantee or shall take measures to ensure that assistance is provided to the Authority in the discharge of its responsibilities under paragraph 6.

Regulation 36

Rights of coastal States

1. Nothing in these Regulations shall affect the rights of coastal States in accordance with article 142 and other relevant provisions of the Convention.

2. Any coastal State which has grounds for believing that any activity in the Area by a contractor is likely to cause a threat of serious or irreversible damage to the marine environment under its jurisdiction or sovereignty may notify the Secretary-General in writing of the grounds upon which such belief is based. The Secretary-General shall provide the Contractor and its sponsoring State or States with a reasonable opportunity to examine the evidence, if any, provided by the coastal State as the basis for its belief. The contractor and its sponsoring State or States may submit their observations thereon to the Secretary-General within a reasonable time.

3. If there are clear grounds for believing that serious harm to the marine environment is likely to occur, the Secretary-General shall act in accordance with regulation 35 and, if necessary, shall take immediate measures of a temporary nature as provided for in paragraph 2 of regulation 35.

4. Contractors shall take all measures necessary to ensure that their activities are conducted so as not to cause damage by pollution to the marine environment under the jurisdiction or sovereignty of other States, and that pollution arising from incidents or activities in its exploration area does not spread beyond such area. [by analogy to article 194]

Regulation 37

Objects of an archaeological or historical nature

The contractor shall immediately notify the Secretary-General in writing of any finding in the exploration area of an object of an archaeological or historical nature and its location. The Secretary-General shall transmit such information to the Director-General of the United Nations Educational, Scientific and Cultural Organization. Following the finding of any such object of an archaeological or historical nature in the exploration area, the contractor shall take all reasonable measures to avoid disturbing such object.

Part VI

Confidentiality

Regulation 38

Proprietary data and information and confidentiality

1. Data and information submitted or transferred to the Authority or to any person participating in any activity or programme of the Authority pursuant to these Regulations or a contract issued under these Regulations, and designated by the contractor, in consultation with the Secretary-General, as being of a confidential nature, shall be considered confidential unless it is data and information which:

- (a) Is generally known or publicly available from other sources;
- (b) Has been previously made available by the owner to others without an obligation concerning its confidentiality; or
- (c) Is already in the possession of the Authority with no obligation concerning its confidentiality.

2. Data and information which is necessary for the formulation by the Authority of rules, regulations and procedures concerning protection of the marine environment and safety, other than equipment design data, shall not be deemed proprietary.

3. Confidential data and information may only be used by the Secretary-General and staff of the Secretariat, as authorized by the Secretary-General, and by the members of the Legal and Technical Commission as necessary for and relevant to the effective exercise of their powers and functions. The Secretary-General shall authorize access to such data and information only for limited use in connection with the functions and duties of the staff of the Secretariat and the functions and duties of the Legal and Technical Commission.

4. Ten years after the date of submission of confidential data and information to the Authority or the expiration of the contract for exploration, whichever is the later, and every five years thereafter, the Secretary-General and the contractor shall review such data and information to determine whether they should remain confidential. Such data and information shall remain confidential if the contractor establishes that there would be a substantial risk of serious and unfair economic prejudice if the data and information were to be released. No such data and information shall be released until the contractor has been accorded a reasonable opportunity to exhaust the judicial remedies available to it pursuant to Part XI, section 5, of the Convention.

5. If, at any time following the expiration of the contract for exploration, the contractor enters into a contract for exploitation in respect of any part of the exploration area, confidential data and information relating to that part of the area shall remain confidential in accordance with the contract for exploitation.
6. The contractor may at any time waive confidentiality of data and information.

Regulation 39

Procedures to ensure confidentiality

1. The Secretary-General shall be responsible for maintaining the confidentiality of all such confidential data and information and shall not, except with the prior written consent of the contractor, release such data and information to any person external to the Authority. To ensure the confidentiality of such data and information, the Secretary-General shall establish procedures, consistent with the provisions of the Convention, governing the handling of confidential information by members of the Secretariat, members of the Legal and Technical Commission and any other person participating in any activity or programme of the Authority. Such procedures shall include:
 - (a) Maintenance of confidential data and information in secure facilities and development of security procedures to prevent unauthorized access to or removal of such data and information;
 - (b) Development and maintenance of a classification, log and inventory system of all written data and information received, including its type and source and routing from the time of receipt until final disposition.
2. A person who is authorized pursuant to these Regulations to have access to confidential data and information shall not disclose such data and information except as permitted under the Convention and these Regulations. The Secretary-General shall require any person who is authorized to have access to confidential data and information to make a written declaration witnessed by the Secretary-General or his or her authorized representative to the effect that the person so authorized:
 - (a) Acknowledges his or her legal obligation under the Convention and these Regulations with respect to the non-disclosure of confidential data and information;
 - (b) Agrees to comply with the applicable regulations and procedures established to ensure the confidentiality of such data and information.
3. The Legal and Technical Commission shall protect the confidentiality of confidential data and information submitted to it pursuant to these Regulations or a contract issued under these Regulations. In accordance with the provisions of article 163, paragraph 8, of the Convention, members of the Commission shall not disclose, even after the termination of their functions, any industrial secret, proprietary data which are transferred to the Authority in accordance with Annex III, article 14, of the Convention, or any other confidential information coming to their knowledge by reason of their duties for the Authority.
4. The Secretary-General and staff of the Authority shall not disclose, even after the termination of their functions with the Authority, any industrial secret, proprietary data which are transferred to the Authority in accordance with Annex

III, article 14, of the Convention, or any other confidential information coming to their knowledge by reason of their employment with the Authority.

5. Taking into account the responsibility and liability of the Authority pursuant to article 22 of Annex III to the Convention, the Authority may take such action as may be appropriate against any person who, by reason of his or her duties for the Authority, has access to any confidential data and information and who is in breach of the obligations relating to confidentiality contained in the Convention and these Regulations.

Part VII

General procedures

Regulation 40

Notice and general procedures

1. Any application, request, notice, report, consent, approval, waiver, direction or instruction hereunder shall be made by the Secretary-General or by the designated representative of the prospector, applicant or contractor, as the case may be, in writing. Service shall be by hand, or by telex, facsimile or registered airmail to the Secretary-General at the headquarters of the Authority or to the designated representative.

2. Delivery by hand shall be effective when made. Delivery by telex shall be deemed to be effective on the business day following the day when the "answer back" appears on the sender's telex machine. Delivery by facsimile shall be effective when the "transmit confirmation report" confirming the transmission to the recipient's published facsimile number is received by the transmitter. Delivery by registered airmail shall be deemed to be effective 21 days after posting.

3. Notice to the designated representative of the prospector, applicant or contractor shall constitute effective notice to the prospector, applicant or contractor for all purposes under these Regulations, and the designated representative shall be the agent of the prospector, applicant or contractor for the service of process or notification in any proceeding of any court or tribunal having jurisdiction.

4. Notice to the Secretary-General shall constitute effective notice to the Authority for all purposes under these Regulations, and the Secretary-General shall be the Authority's agent for the service of process or notification in any proceeding of any court or tribunal having jurisdiction.

Regulation 41

Recommendations for the guidance of contractors

1. The Legal and Technical Commission may from time to time issue recommendations of a technical or administrative nature for the guidance of contractors to assist them in the implementation of the rules, regulations and procedures of the Authority.

2. The full text of such recommendations shall be reported to the Council. Should the Council find that a recommendation is inconsistent with the intent and purpose of these Regulations, it may request that the recommendation be modified or withdrawn.

Part VIII

Settlement of disputes

Regulation 42

Disputes

1. Disputes concerning the interpretation or application of these Regulations shall be settled in accordance with Part XI, section 5, of the Convention.
2. Any final decision rendered by a court or tribunal having jurisdiction under the Convention relating to the rights and obligations of the Authority and of the Contractor shall be enforceable in the territory of each State Party to the Convention.

Part IX

Resources other than polymetallic sulphides and cobalt crusts

Regulation 43

Resources other than polymetallic sulphides and cobalt crusts

If a prospector or contractor finds resources in the Area other than polymetallic sulphides and cobalt crusts, the prospecting and exploration for and exploitation of such resources shall be subject to the rules, regulations and procedures of the Authority relating to such resources in accordance with the Convention and the Agreement.

Annex 1 to the draft regulations

Notification of intention to engage in prospecting

1. Name of prospector:
2. Street address of prospector:
3. Postal address (if different from above):
4. Telephone number:
5. Facsimile number:
6. Electronic mail address:
7. Nationality of prospector:
8. If prospector is a juridical person, identify prospector's
 - (a) place of registration; and
 - (b) principal place of business/domicileand attach a copy of the prospector's certificate of registration.
9. Name of prospector's designated representative:
10. Street address of prospector's designated representative (if different from above):
11. Postal address (if different from above):
12. Telephone number:
13. Facsimile number:
14. Electronic mail address:
15. Attach the coordinates of the broad area or areas in which prospecting is to be conducted (in accordance with the World Geodetic System WGS 84).
16. Attach a general description of the prospecting programme, including the date of commencement and the approximate duration of the programme.
17. Attach a written undertaking that the prospector will:
 - (a) comply with the Convention and the relevant rules, regulations and procedures of the Authority concerning:
 - (i) cooperation in the training programmes in connection with marine scientific research and transfer of technology referred to in articles 143 and 144 of the Convention; and
 - (ii) protection of the marine environment;
 - (b) accept verification by the Authority of compliance therewith; and
 - (c) make available to the Authority, as far as practicable, such data as may be relevant to the protection and preservation of the marine environment.

18. List hereunder all the attachments and annexes to this notification (all data and information should be submitted in hard copy and in a digital format specified by the Authority):

Date: _____

Signature of prospector's designated representative

ATTESTATION:

Signature of person attesting

Name of person attesting

Title of person attesting

Annex 2 to the draft regulations

Application for approval of a plan of work for exploration to obtain a contract

Section I

Information concerning the applicant

1. Name of applicant:
2. Street address of applicant:
3. Postal address (if different from above):
4. Telephone number:
5. Facsimile number:
6. Electronic mail address:
7. Name of applicant's designated representative:
8. Street address of applicant's designated representative (if different from above):
9. Postal address (if different from above):
10. Telephone number:
11. Facsimile number:
12. Electronic mail address:
13. If the applicant is a juridical person, identify applicant's
 - (a) place of registration; and
 - (b) principal place of business/domicile

and attach a copy of the applicant's certificate of registration.

14. Identify the sponsoring State or States.
15. In respect of each sponsoring State, provide the date of deposit of its instrument of ratification of, or accession or succession to, the 1982 United Nations Convention on the Law of the Sea and the date of its consent to be bound by the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982.
16. A certificate of sponsorship issued by the sponsoring State must be attached with this application. If the applicant has more than one nationality, as in the case of a partnership or consortium of entities from more than one State, certificates of sponsorship issued by each of the States involved must be attached.

Section II

Applicant's election with respect to a reserved area contribution, joint venture participation or production sharing contract

17. Elect either:

- (a) To contribute a reserved area to carry out activities pursuant to Annex III, article 9, of the Convention, in accordance with regulation 17; or
- (b) To offer an equity interest in a joint venture arrangement in accordance with regulation 19; or
- (c) To enter into a production-sharing contract in accordance with regulation 19.

Section III

Information relating to the area under application

18. Define the boundaries of the area under application by attaching a list of geographical coordinates (in accordance with the World Geodetic System WGS 84).

19. Attach a chart (on a scale and projection specified by the Authority) and, if the applicant elects to contribute a reserved area in accordance with regulation 16, a list of the coordinates dividing the total area into two parts of equal estimated commercial value.

20. If the applicant elects to contribute a reserved area in accordance with regulation 16, include in an attachment sufficient information to enable the Council to designate a reserved area based on the estimated commercial value of each part of the area under application. Such attachment must include the data available to the applicant with respect to both parts of the area under application, including:

- (a) Data on the location, survey and evaluation of the polymetallic sulphides and cobalt crusts in the areas, including:
 - (i) A description of the technology related to the recovery and processing of polymetallic sulphides and cobalt crusts that is necessary for making the designation of a reserved area;
 - (ii) A map of the physical and geological characteristics, such as seabed topography, bathymetry and bottom currents and information on the reliability of such data;
 - (iii) Data showing the average density (abundance) of polymetallic sulphides and cobalt crusts in kg/m^2 and an associated abundance map showing the location of sampling sites;
 - (iv) Data showing the average elemental content of metals of economic interest (grade) based on chemical assays in (dry) weight per cent and an associated grade map;
 - (v) Combined maps of abundance and grade of polymetallic sulphides and cobalt crusts;

(vi) A calculation based on standard procedures, including statistical analysis, using the data submitted and assumptions made in the calculations that the two areas could be expected to contain polymetallic sulphides and cobalt crusts of equal estimated commercial value expressed as recoverable metals in mineable areas;

(vii) A description of the techniques used by the applicant.

(b) Information concerning environmental parameters (seasonal and during test period) including, inter alia, wind speed and direction, wave height, period and direction, current speed and direction, water salinity, temperature and biological communities.

21. If the area under application includes any part of a reserved area, attach a list of coordinates of the area which forms part of the reserved area and indicate the applicant's qualifications in accordance with regulation 18 of the Regulations.

Section IV

Financial and technical information

22. Attach sufficient information to enable the Council to determine whether the applicant is financially capable of carrying out the proposed plan of work for exploration and of fulfilling its financial obligations to the Authority.

(a) If the application is made by the Enterprise, attach certification by its competent authority that the Enterprise has the necessary financial resources to meet the estimated costs of the proposed plan of work for exploration.

(b) If the application is made by a State or a state enterprise, attach a statement by the State or the sponsoring State certifying that the applicant has the necessary financial resources to meet the estimated costs of the proposed plan of work for exploration.

(c) If the application is made by an entity, attach copies of the applicant's audited financial statements, including balance sheets and profit-and-loss statements, for the most recent three years in conformity with internationally accepted accounting principles and certified by a duly qualified firm of public accountants; and

(i) If the applicant is a newly organized entity and a certified balance sheet is not available, a pro forma balance sheet certified by an appropriate official of the applicant;

(ii) If the applicant is a subsidiary of another entity, copies of such financial statements of that entity and a statement from that entity in conformity with internationally accepted accounting practices and certified by a duly qualified firm of public accountants that the applicant will have the financial resources to carry out the plan of work for exploration;

(iii) If the applicant is controlled by a State or a state enterprise, a statement from the State or state enterprise certifying that the applicant will have the financial resources to carry out the plan of work for exploration.

23. If it is intended to finance the proposed plan of work by borrowings, attach a statement of the amount of such borrowings, the repayment period and the interest rate.

24. Attach sufficient information to enable the Council to determine whether the applicant is technically capable of carrying out the proposed plan of work, including:

(a) A general description of the applicant's previous experience, knowledge, skills, technical qualifications and expertise relevant to the proposed plan of work for exploration;

(b) A general description of the equipment and methods expected to be used in carrying out the proposed plan of work for exploration and other relevant non-proprietary information about the characteristics of such technology; and

(c) Curricula vitae of the senior managers and key technical personnel expected to be employed in carrying out the proposed plan of work for exploration; and

(d) A general description of the applicant's financial and technical capability to respond to any incident or activity which causes serious harm to the marine environment.

Section V

The plan of work for exploration

25. Attach the following information relating to the plan of work for exploration:

(a) A general description and a schedule of the proposed exploration programme, including the programme of activities for the immediate five-year period, such as studies to be undertaken in respect of the environmental, technical, economic and other appropriate factors which must be taken into account in exploration;

(b) A description of a programme for oceanographic and environmental baseline studies in accordance with the Regulations and any environmental rules, regulations and procedures established by the Authority that would enable an assessment of the potential environmental impact of the proposed exploration activities, taking into account any recommendations issued by the Legal and Technical Commission;

(c) A preliminary assessment of the possible impact of the proposed exploration activities on the marine environment;

(d) A description of the proposed measures for the prevention, reduction and control of pollution and other hazards, as well as possible impacts, to the marine environment;

(e) A schedule of anticipated yearly expenditures in respect of the programme of activities for the immediate five-year period.

Section VI
Undertakings

26. Attach a written undertaking that the applicant will:

(a) Accept as enforceable and comply with the applicable obligations created by the provisions of the Convention and the rules, regulations and procedures of the Authority, the decisions of the organs of the Authority and the terms of its contracts with the Authority;

(b) Accept control by the Authority of activities in the Area as authorized by the Convention;

(c) Provide the Authority with a written assurance that its obligations under the contract will be fulfilled in good faith.

Section VII
Previous contracts

27. Has the applicant or, in the case of an application by a partnership or consortium of entities in a joint arrangement, any member of the partnership or consortium or any affiliate previously been awarded any contract with the Authority? For purposes of this application, applicants are affiliated if they are, directly or indirectly, controlling, controlled by or under common control with each other or another person, firm, corporation or entity.

28. If the answer to 27 is "yes", the application must include:

(a) The date of the previous contract or contracts;

(b) The dates, reference numbers and titles of each report submitted to the Authority in connection with the contract or contracts; and

(c) The date of termination of the contract or contracts, if applicable.

Section VIII
Attachments

29. List all the attachments and annexes to this application (all data and information should be submitted in hard copy and in a digital format specified by the Authority):

Date: _____

Signature of applicant's designated representative

ATTESTATION:

Signature of person attesting

Name of person attesting

Title of person attesting

Annex 3 to the draft regulations

Contract for exploration

THIS CONTRACT made the day of between the INTERNATIONAL SEABED AUTHORITY represented by its SECRETARY-GENERAL (hereinafter referred to as "the Authority") and represented by (hereinafter referred to as "the Contractor") WITNESSETH as follows:

Incorporation of clauses

A. The standard clauses set out in annex 4 to the Regulations on Prospecting and Exploration for Polymetallic Sulphides and Cobalt Crusts in the Area shall be incorporated herein and shall have effect as if herein set out at length.

Exploration area

B. For the purposes of this contract, the "exploration area" means that part of the Area allocated to the Contractor for exploration, defined by the coordinates listed in schedule 1 hereto, as reduced from time to time in accordance with the standard clauses and the Regulations.

Grant of rights

C. In consideration of:

(1) Their mutual interest in the conduct of exploration activities in the exploration area pursuant to the Convention and the Agreement;

(2) The responsibility of the Authority to organize and control activities in the Area, particularly with a view to administering the resources of the Area, in accordance with the legal regime established in Part XI of the Convention and the Agreement and Part XII of the Convention respectively; and

(3) The interest and financial commitment of the Contractor in conducting activities in the exploration area and the mutual covenants made herein, the Authority hereby grants to the Contractor the exclusive right to explore for polymetallic sulphides and cobalt crusts in the exploration area in accordance with the terms and conditions of this contract.

Entry into force and contract term

D. This contract shall enter into force on signature by both parties and, subject to the standard clauses, shall remain in force for a period of fifteen years thereafter unless:

(1) The Contractor obtains a contract for exploitation in the exploration area which enters into force before the expiration of such period of fifteen years; or

(2) The contract is sooner terminated, provided that the term of the contract may be extended in accordance with standard clauses 3.2 and 17.2.

Schedules

E. The schedules referred to in the standard clauses, namely section 4 and section 7, are for the purposes of this contract schedules 2 and 3 respectively.

Entire agreement

F. This contract expresses the entire agreement between the parties, and no oral understanding or prior writing shall modify the terms hereof.

IN WITNESS WHEREOF the undersigned, being duly authorized thereto by the respective parties, have signed this contract at ..., this ... day of ...

Schedule 1

[Coordinates and illustrative chart of the exploration area]

Schedule 2

[The current five-year programme of activities as revised from time to time]

Schedule 3

[The training programme shall become a schedule to the contract when approved by the Authority in accordance with section 8 of the standard clauses.]

Annex 4 to the draft regulations

Standard clauses for exploration contract

Section 1

Definitions

1.1 In the following clauses:

(a) "exploration area" means that part of the Area allocated to the Contractor for exploration, described in schedule 1 hereto, as the same may be reduced from time to time in accordance with this contract and the Regulations;

(b) "programme of activities" means the programme of activities which is set out in schedule 2 hereto as the same may be adjusted from time to time in accordance with sections 4.3 and 4.4 hereof;

(c) "Regulations" means the Regulations for Prospecting and Exploration for Polymetallic Sulphides and Cobalt Crusts in the Area, adopted by the Authority.

1.2 Terms and phrases defined in the Regulations shall have the same meaning in these standard clauses.

1.3 In accordance with the Agreement relating to the Implementation of Part XI of the United Nations Convention of the Law of the Sea of 10 December 1982, its provisions and Part XI of the Convention are to be interpreted and applied together as a single instrument; this contract and references in this contract to the Convention are to be interpreted and applied accordingly.

1.4 This contract includes the schedules to this contract, which shall be an integral part hereof.

Section 2

Security of tenure

2.1 The Contractor shall have security of tenure and this contract shall not be suspended, terminated or revised except in accordance with sections 20, 21 and 24 hereof.

2.2 The Contractor shall have the exclusive right to explore for polymetallic sulphides and cobalt crusts in the exploration area in accordance with the terms and conditions of this contract. The Authority shall ensure that no other entity operates in the exploration area for a different category of resources in a manner that might unreasonably interfere with the operations of the Contractor.

2.3 The Contractor, by notice to the Authority, shall have the right at any time to renounce without penalty the whole or part of its rights in the exploration area, provided that the Contractor shall remain liable for all obligations accrued prior to the date of such renunciation in respect of the area renounced.

2.4 Nothing in this contract shall be deemed to confer any right on the Contractor other than those rights expressly granted herein. The Authority reserves the right to enter into contracts with respect to resources other than polymetallic sulphides and cobalt crusts with third parties in the area covered by this contract.

Section 3

Contract term

3.1 This contract shall enter into force on signature by both parties and shall remain in force for a period of fifteen years thereafter unless:

(a) The Contractor obtains a contract for exploitation in the exploration area which enters into force before the expiration of such period of fifteen years; or

(b) The contract is sooner terminated,

provided that the term of the contract may be extended in accordance with sections 3.2 and 17.2 hereof.

3.2 Upon application by the Contractor, not later than six months before the expiration of this contract, this contract may be extended for periods of not more than five years each on such terms and conditions as the Authority and the Contractor may then agree in accordance with the Regulations. Such extensions shall be approved if the Contractor has made efforts in good faith to comply with the requirements of this contract but for reasons beyond the Contractor's control has been unable to complete the necessary preparatory work for proceeding to the exploitation stage or if the prevailing economic circumstances do not justify proceeding to the exploitation stage.

3.3 Notwithstanding the expiration of this contract in accordance with section 3.1 hereof, if the Contractor has, at least 90 days prior to the date of expiration, applied for a contract for exploitation, the Contractor's rights and obligations under this contract shall continue until such time as the application has been considered and a contract for exploitation has been issued or refused.

Section 4

Exploration

4.1 The Contractor shall commence exploration in accordance with the time schedule stipulated in the programme of activities set out in schedule 2 hereto and shall adhere to such time periods or any modification thereto as provided for by this contract.

4.2 The Contractor shall carry out the programme of activities set out in schedule 2 hereto. In carrying out such activities the Contractor shall spend in each contract year not less than the amount specified in such programme, or any agreed review thereof, in actual and direct exploration expenditures.

4.3 The Contractor, with the consent of the Authority, which consent shall not be unreasonably withheld, may from time to time make such changes in the programme of activities and the expenditures specified therein as may be necessary and prudent in accordance with good mining industry practice, and taking into account the market conditions for the metals contained in polymetallic sulphides and cobalt crusts and other relevant global economic conditions.

4.4 Not later than 90 days prior to the expiration of each five-year period from the date on which this contract enters into force in accordance with section 3 hereof, the Contractor and the Secretary-General shall jointly undertake a review of the implementation of the plan of work for exploration under this contract. The Secretary-General may require the Contractor to submit such additional data and

information as may be necessary for the purposes of the review. The Contractor shall make such adjustments to its plan of work as are necessary in the light of the review and shall indicate its programme of activities for the following five-year period, including a revised schedule of anticipated yearly expenditures. Schedule 2 hereto shall be adjusted accordingly.

Section 5

Environmental monitoring

5.1 The Contractor shall take necessary measures to prevent, reduce and control pollution and other hazards to the marine environment arising from its activities in the Area as far as reasonably possible using for this purpose the best practicable means at its disposal.

5.2 Prior to the commencement of exploration activities, the Contractor shall submit to the Authority:

- (a) An impact assessment of the potential effects on the marine environment of the proposed activities;
- (b) A proposal for a monitoring programme to determine the potential effect on the marine environment of the proposed activities; and
- (c) Data that could be used to establish an environmental baseline against which to assess the effect of the proposed activities.

5.3 The Contractor shall, in accordance with the Regulations, gather environmental baseline data as exploration activities progress and develop and shall establish environmental baselines against which to assess the likely effects of the Contractor's activities on the marine environment.

5.4 The Contractor shall, in accordance with the Regulations, establish and carry out a programme to monitor and report on such effects on the marine environment. The Contractor shall cooperate with the Authority in the implementation of such monitoring.

5.5 The Contractor shall, within 90 days of the end of each calendar year, report to the Secretary-General on the implementation and results of the monitoring programme referred to in section 5.3 hereof and shall submit data and information in accordance with the Regulations.

Section 6

Contingency plans and emergencies

6.1 The Contractor shall, prior to the commencement of its programme of activities under this contract, submit to the Secretary-General a contingency plan to respond effectively to incidents that are likely to cause serious harm to the marine environment arising from the Contractor's activities at sea in the exploration area. Such contingency plan shall establish special procedures and provide for adequate and appropriate equipment to deal with such incidents and, in particular, shall include arrangements for:

- (a) The immediate raising of a general alarm in the area of the exploration activities;
- (b) Immediate notification to the Secretary-General;

- (c) The warning of ships which might be about to enter the immediate vicinity;
- (d) A continuing flow of full information to the Secretary-General relating to particulars of the contingency, measures already taken and further actions required;
- (e) The removal, as appropriate, of polluting substances;
- (f) The reduction and, so far as reasonably possible, prevention of serious harm to the marine environment, as well as mitigation of such effects;
- (g) As appropriate, cooperation with other contractors with the Authority to respond to a contingency; and
- (h) Periodic emergency response exercises.

6.2 The Contractor shall promptly report to the Secretary-General any incident arising from its activities that has caused or is likely to cause serious harm to the marine environment. Each such report shall contain the details of such incident, including, inter alia:

- (a) The coordinates of the area affected or which can reasonably be anticipated to be affected;
- (b) The description of the action being taken by the Contractor to prevent, contain, minimize and repair the serious harm to the marine environment;
- (c) A description of the action being taken by the Contractor to monitor the effects of the incidents on the marine environment; and
- (d) Such supplementary information as may reasonably be required by the Secretary-General.

6.3 The Contractor shall comply with emergency orders issued by the Council and immediate measures of a temporary nature issued by the Secretary-General in accordance with the Regulations, to prevent, contain, minimize or repair serious harm to the marine environment, which may include orders to the Contractor to immediately suspend or adjust any activities in the exploration area.

6.4 If the Contractor does not promptly comply with such emergency orders or immediate measures of a temporary nature, the Council may take such reasonable measures as are necessary to prevent, contain, minimize or repair any such serious harm to the marine environment at the Contractor's expense. The Contractor shall promptly reimburse the Authority the amount of such expenses. Such expenses shall be in addition to any monetary penalties which may be imposed on the Contractor pursuant to the terms of this contract or the Regulations.

Section 7

Objects of an archaeological or historical nature

The Contractor shall immediately notify the Secretary-General in writing of any finding in the exploration area of an object of an archaeological or historical nature and its location. Following the finding of any such object of an archaeological or historical nature in the exploration area, the Contractor shall take all reasonable measures to avoid disturbing such object.

Section 8

Training

8.1 In accordance with the Regulations, the Contractor shall, prior to the commencement of exploration under this contract, submit to the Authority for approval proposed training programmes for the training of personnel of the Authority and developing States, including the participation of such personnel in all of the Contractor's activities under this contract.

8.2. The scope and financing of the training programme shall be subject to negotiation between the Contractor, the Authority and the sponsoring State or States.

8.3 The Contractor shall conduct training programmes in accordance with the specific programme for the training of personnel referred to in section 8.1 hereof approved by the Authority in accordance with the Regulations, which programme, as revised and developed from time to time, shall become a part of this contract as schedule 3.

Section 9

Books and records

The Contractor shall keep a complete and proper set of books, accounts and financial records, consistent with internationally accepted accounting principles. Such books, accounts and financial records shall include information which will fully disclose the actual and direct expenditures for exploration and such other information as will facilitate an effective audit of such expenditures.

Section 10

Annual reports

10.1 The Contractor shall, within 90 days of the end of each calendar year, submit a report to the Secretary-General in such format as may be specified from time to time by the Legal and Technical Commission covering its programme of activities in the exploration area and containing, as applicable, information in sufficient detail on:

(a) The exploration work carried out during the calendar year, including maps, charts and graphs illustrating the work that has been done and the results obtained;

(b) The equipment used to carry out the exploration work, including the results of tests conducted of proposed mining technologies, but not equipment design data; and

(c) The implementation of training programmes, including any proposed revisions to or developments of such programmes.

10.2 Such reports shall also contain:

(a) The results obtained from environmental monitoring programmes, including observations, measurements, evaluations and analyses of environmental parameters;

(b) A statement of the quantity of polymetallic sulphides and cobalt crusts recovered as samples or for the purpose of testing;

(c) A statement, in conformity with internationally accepted accounting principles and certified by a duly qualified firm of public accountants, or, where the Contractor is a State or a state enterprise, by the sponsoring State, of the actual and direct exploration expenditures of the Contractor in carrying out the programme of activities during the Contractor's accounting year. Such expenditures may be claimed by the contractor as part of the contractor's development costs incurred prior to the commencement of commercial production; and

(d) Details of any proposed adjustments to the programme of activities and the reasons for such adjustments.

10.3 The Contractor shall also submit such additional information to supplement the reports referred to in sections 10.1 and 10.2 hereof as the Secretary-General may from time to time reasonably require in order to carry out the Authority's functions under the Convention, the Regulations and this contract.

10.4 The Contractor shall keep, in good condition, a representative portion of samples of the polymetallic sulphides and cobalt crusts obtained in the course of exploration until the expiration of this contract. The Authority may request the Contractor in writing to deliver to it for analysis a portion of any such sample obtained during the course of exploration.

Section 11

Data and information to be submitted on expiration of the contract

11.1 The Contractor shall transfer to the Authority all data and information that are both necessary for and relevant to the effective exercise of the powers and functions of the Authority in respect of the exploration area in accordance with the provisions of this section.

11.2 Upon expiration or termination of this contract the Contractor, if it has not already done so, shall submit the following data and information to the Secretary-General:

(a) Copies of geological, environmental, geochemical and geophysical data acquired by the Contractor in the course of carrying out the programme of activities that are necessary for and relevant to the effective exercise of the powers and functions of the Authority in respect of the exploration area;

(b) The estimation of mineable areas, when such areas have been identified, which shall include details of the grade and quantity of the proven, probable and possible polymetallic sulphides and cobalt crusts reserves and the anticipated mining conditions;

(c) Copies of geological, technical, financial and economic reports made by or for the Contractor that are necessary for and relevant to the effective exercise of the powers and functions of the Authority in respect of the exploration area;

(d) Information in sufficient detail on the equipment used to carry out the exploration work, including the results of tests conducted of proposed mining technologies, but not equipment design data; and

(e) A statement of the quantity of polymetallic sulphides and cobalt crusts recovered as samples or for the purpose of testing.

11.3 The data and information referred to in section 11.2 hereof shall also be submitted to the Secretary-General if, prior to the expiration of this contract, the Contractor applies for approval of a plan of work for exploitation or if the Contractor renounces its rights in the exploration area to the extent that such data and information relates to the renounced area.

Section 12

Confidentiality

Data and information transferred to the Authority in accordance with this contract shall be treated as confidential in accordance with the provisions of this section and the Regulations.

Section 13

Undertakings

13.1 The Contractor shall carry out exploration in accordance with the terms and conditions of this contract, the Regulations, Part XI of the Convention, the Agreement and other rules of international law not incompatible with the Convention.

13.2 The Contractor undertakes:

- (a) To accept as enforceable and comply with the terms of this contract;
- (b) To comply with the applicable obligations created by the provisions of the Convention, the rules, regulations and procedures of the Authority;
- (c) To accept control by the Authority of activities in the Area as authorized by the Convention;
- (d) To fulfil its obligations under this contract in good faith; and
- (e) To observe, as far as reasonably practicable, any recommendations which may be issued from time to time by the Legal and Technical Commission.

13.3 The Contractor shall actively carry out the programme of activities:

- (a) With due diligence, efficiency and economy;
- (b) With due regard to the impact of its activities on the marine environment; and
- (c) With reasonable regard for other activities in the marine environment.

13.4 The Authority undertakes to fulfil in good faith its powers and functions under the Convention and the Agreement in accordance with article 157 of the Convention.

Section 14

Inspection

14.1 The Contractor shall permit the Authority to send its inspectors on board vessels and installations used by the Contractor to carry out activities in the exploration area to:

- (a) Monitor the Contractor's compliance with the terms and conditions of this contract and the Regulations; and

- (b) Monitor the effects of such activities on the marine environment.

14.2 The Secretary-General shall give reasonable notice to the Contractor of the projected time and duration of inspections, the name of the inspectors and any activities the inspectors are to perform that are likely to require the availability of special equipment or special assistance from personnel of the Contractor.

14.3 Such inspectors shall have the authority to inspect any vessel or installation, including its log, equipment, records, facilities, all other recorded data and any relevant documents which are necessary to monitor the Contractor's compliance.

14.4 The Contractor, its agents and employees shall assist the inspectors in the performance of their duties and shall:

- (a) Accept and facilitate prompt and safe boarding of vessels and installations by inspectors;

- (b) Cooperate with and assist in the inspection of any vessel or installation conducted pursuant to these procedures;

- (c) Provide access to all relevant equipment, facilities and personnel on vessels and installations at all reasonable times;

- (d) Not obstruct, intimidate or interfere with inspectors in the performance of their duties;

- (e) Provide reasonable facilities, including, where appropriate, food and accommodation, to inspectors; and

- (f) Facilitate safe disembarkation by inspectors.

14.5 Inspectors shall avoid interference with the safe and normal operations on board vessels and installations used by the Contractor to carry out activities in the area visited and shall act in accordance with the Regulations and the measures adopted to protect confidentiality of data and information.

14.6 The Secretary-General and any duly authorized representatives of the Secretary-General, shall have access, for purposes of audit and examination, to any books, documents, papers and records of the Contractor which are necessary and directly pertinent to verify the expenditures referred to in section 10.2(c).

14.7 The Secretary-General shall provide relevant information contained in the reports of inspectors to the Contractor and its sponsoring State or States where action is necessary.

14.8 If for any reason the Contractor does not pursue exploration and does not request a contract for exploitation, it shall, before withdrawing from the exploration area, notify the Secretary-General in writing in order to permit the Authority, if it so decides, to carry out an inspection pursuant to this section.

Section 15

Safety, labour and health standards

15.1 The Contractor shall comply with the generally accepted international rules and standards established by competent international organizations or general diplomatic conferences concerning the safety of life at sea, and the prevention of collisions and such rules, regulations and procedures as may be adopted by the

Authority relating to safety at sea. Each vessel used for carrying out activities in the Area shall possess current valid certificates required by and issued pursuant to such international rules and standards.

15.2 The Contractor shall, in carrying out exploration under this contract, observe and comply with such rules, regulations and procedures as may be adopted by the Authority relating to protection against discrimination in employment, occupational safety and health, labour relations, social security, employment security and living conditions at the work site. Such rules, regulations and procedures shall take into account conventions and recommendations of the International Labour Organization and other competent international organizations.

Section 16

Responsibility and liability

16.1 The Contractor shall be liable for the actual amount of any damage, including damage to the marine environment, arising out of its wrongful acts or omissions, and those of its employees, subcontractors, agents and all persons engaged in working or acting for them in the conduct of its operations under this contract, including the costs of reasonable measures to prevent or limit damage to the marine environment, account being taken of any contributory acts or omissions by the Authority.

16.2 The Contractor shall indemnify the Authority, its employees, subcontractors and agents against all claims and liabilities of any third party arising out of any wrongful acts or omissions of the Contractor and its employees, agents and subcontractors, and all persons engaged in working or acting for them in the conduct of its operations under this contract.

16.3 The Authority shall be liable for the actual amount of any damage to the Contractor arising out of its wrongful acts in the exercise of its powers and functions, including violations under article 168, paragraph 2, of the Convention, account being taken of contributory acts or omissions by the Contractor, its employees, agents and subcontractors, and all persons engaged in working or acting for them in the conduct of its operations under this contract.

16.4 The Authority shall indemnify the Contractor, its employees, subcontractors, agents and all persons engaged in working or acting for them in the conduct of its operations under this contract, against all claims and liabilities of any third party arising out of any wrongful acts or omissions in the exercise of its powers and functions hereunder, including violations under article 168, paragraph 2, of the Convention.

16.5 The Contractor shall maintain appropriate insurance policies with internationally recognized carriers, in accordance with generally accepted international maritime practice.

Section 17

Force majeure

17.1 The Contractor shall not be liable for an unavoidable delay or failure to perform any of its obligations under this contract due to force majeure. For purposes of this contract, force majeure shall mean an event or condition that the Contractor could not reasonably be expected to prevent or control; provided that the event or

condition was not caused by negligence or by a failure to observe good mining industry practice.

17.2 The Contractor shall, upon request, be granted a time extension equal to the period by which performance was delayed hereunder by force majeure and the term of this contract shall be extended accordingly.

17.3 In the event of force majeure, the Contractor shall take all reasonable measures to remove its inability to perform and comply with the terms and conditions of this contract with a minimum of delay; provided that the Contractor shall not be obligated to resolve or terminate any labour dispute or any other disagreement with a third party except on terms satisfactory to it or pursuant to a final decision of any agency having jurisdiction to resolve the dispute.

17.4 The Contractor shall give notice to the Authority of the occurrence of an event of force majeure as soon as reasonably possible, and similarly give notice to the Authority of the restoration of normal conditions.

Section 18 **Disclaimer**

Neither the Contractor nor any affiliated company or subcontractor shall in any manner claim or suggest, whether expressly or by implication, that the Authority or any official thereof has, or has expressed, any opinion with respect to polymetallic sulphides and cobalt crusts in the exploration area and a statement to that effect shall not be included in or endorsed on any prospectus, notice, circular, advertisement, press release or similar document issued by the Contractor, any affiliated company or any subcontractor that refers directly or indirectly to this contract. For the purposes of this section, an "affiliated company" means any person, firm or company or State-owned entity controlling, controlled by, or under common control with, the Contractor.

Section 19 **Renunciation of rights**

The Contractor, by notice to the Authority, shall have the right to renounce its rights and terminate this contract without penalty, provided that the Contractor shall remain liable for all obligations accrued prior to the date of such renunciation and those obligations required to be fulfilled after termination in accordance with the Regulations.

Section 20 **Termination of sponsorship**

20.1 If the nationality or control of the Contractor changes or the Contractor's sponsoring State, as defined in the Regulations, terminates its sponsorship, the Contractor shall promptly notify the Authority forthwith.

20.2 In either such event, if the Contractor does not obtain another sponsor meeting the requirements prescribed in the Regulations which submits to the Authority a certificate of sponsorship for the Contractor in the prescribed form within the time specified in the Regulations, this contract shall terminate forthwith.

Section 21

Suspension and termination of contract and penalties

21.1 The Council may suspend or terminate this contract, without prejudice to any other rights that the Authority may have, if any of the following events should occur:

(a) If, in spite of written warnings by the Authority, the Contractor has conducted its activities in such a way as to result in serious persistent and wilful violations of the fundamental terms of this contract, Part XI of the Convention, the Agreement and the rules, regulations and procedures of the Authority; or

(b) If the Contractor has failed to comply with a final binding decision of the dispute settlement body applicable to it; or

(c) If the Contractor becomes insolvent or commits an act of bankruptcy or enters into any agreement for composition with its creditors or goes into liquidation or receivership, whether compulsory or voluntary, or petitions or applies to any tribunal for the appointment of a receiver or a trustee or receiver for itself or commences any proceedings relating to itself under any bankruptcy, insolvency or readjustment of debt law, whether now or hereafter in effect, other than for the purpose of reconstruction.

21.2 Any suspension or termination shall be by notice, through the Secretary-General, which shall include a statement of the reasons for taking such action. The suspension or termination shall be effective 60 days after such notice, unless the Contractor within such period disputes the Authority's right to suspend or terminate this contract in accordance with Part XI, section 5, of the Convention.

21.3 If the Contractor takes such action, this contract shall only be suspended or terminated in accordance with a final binding decision in accordance with Part XI, section 5, of the Convention.

21.4 If the Council has suspended this contract, the Council may by notice require the Contractor to resume its operations and comply with the terms and conditions of this contract, not later than 60 days after such notice.

21.5 In the case of any violation of this contract not covered by section 21.1(a) hereof, or in lieu of suspension or termination under section 21.1 hereof, the Council may impose upon the Contractor monetary penalties proportionate to the seriousness of the violation.

21.6 The Council may not execute a decision involving monetary penalties until the Contractor has been accorded a reasonable opportunity to exhaust the judicial remedies available to it pursuant to Part XI, section 5, of the Convention.

21.7 In the event of termination or expiration of this contract, the Contractor shall comply with the Regulations and shall remove all installations, plant, equipment and materials in the exploration area and shall make the area safe so as not to constitute a danger to persons, shipping or to the marine environment.

Section 22

Transfer of rights and obligations

22.1 The rights and obligations of the Contractor under this contract may be transferred in whole or in part only with the consent of the Authority and in accordance with the Regulations.

22.2 The Authority shall not unreasonably withhold consent to the transfer if the proposed transferee is in all respects a qualified applicant in accordance with the Regulations and assumes all of the obligations of the Contractor and if the transfer does not confer to the transferee a plan of work, the approval of which would be forbidden by article 6, paragraph 3 (c), of Annex 3 to the Convention.

22.3 The terms, undertakings and conditions of this contract shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

Section 23

No waiver

No waiver by either party of any rights pursuant to a breach of the terms and conditions of this contract to be performed by the other party shall be construed as a waiver by the party of any succeeding breach of the same or any other term or condition to be performed by the other party.

Section 24

Revision

24.1 When circumstances have arisen or are likely to arise which, in the opinion of the Authority or the Contractor, would render this contract inequitable or make it impracticable or impossible to achieve the objectives set out in this contract or in Part XI of the Convention or the Agreement, the parties shall enter into negotiations to revise it accordingly.

24.2 This contract may also be revised by agreement between the Contractor and the Authority to facilitate the application of any rules, regulations and procedures adopted by the Authority subsequent to the entry into force of this contract.

24.3 This contract may be revised, amended or otherwise modified only with the consent of the Contractor and the Authority by an appropriate instrument signed by the authorized representatives of the parties.

Section 25

Disputes

25.1 Any dispute between the parties concerning the interpretation or application of this contract shall be settled in accordance with Part XI, section 5, of the Convention.

25.2 Any final decision rendered by a court or tribunal having jurisdiction under the Convention relating to the rights and obligations of the Authority and of the Contractor shall be enforceable in the territory of each State Party to the Convention.

Section 26

Notice

26.1 Any application, request, notice, report, consent, approval, waiver, direction or instruction hereunder shall be made by the Secretary-General or by the designated representative of the Contractor, as the case may be, in writing. Service shall be by

hand, or by telex, facsimile or registered airmail to the Secretary-General at the headquarters of the Authority or to the designated representative.

26.2 Either party shall be entitled to change any such address to any other address by not less than ten days' notice to the other party.

26.3 Delivery by hand shall be effective when made. Delivery by telex shall be deemed to be effective on the business day following the day when the "answer back" appears on the sender's telex machine. Delivery by facsimile shall be effective when the "transmit confirmation report" confirming the transmission to the recipient's published facsimile number is received by the transmitter. Delivery by registered airmail shall be deemed to be effective 21 days after posting.

26.4 Notice to the designated representative of the Contractor shall constitute effective notice to the Contractor for all purposes under this contract, and the designated representative shall be the Contractor's agent for the service of process or notification in any proceeding of any court or tribunal having jurisdiction.

26.5 Notice to the Secretary-General shall constitute effective notice to the Authority for all purposes under this contract, and the Secretary-General shall be the Authority's agent for the service of process or notification in any proceeding of any court or tribunal having jurisdiction.

Section 27

Applicable law

27.1 This contract shall be governed by the terms of this contract, the rules, regulations and procedures of the Authority, Part XI of the Convention, the Agreement and other rules of international law not incompatible with the Convention.

27.2 The Contractor, its employees, subcontractors, agents and all persons engaged in working or acting for them in the conduct of its operations under this contract shall observe the applicable law referred to in section 27.1 hereof and shall not engage in any transaction, directly or indirectly, prohibited by the applicable law.

27.3 Nothing contained in this contract shall be deemed an exemption from the necessity of applying for and obtaining any permit or authority that may be required for any activities under this contract.

Section 28

Interpretation

The division of this contract into sections and subsections and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation hereof.

Section 29

Additional documents

Each party hereto agrees to execute and deliver all such further instruments, and to do and perform all such further acts and things as may be necessary or expedient to give effect to the provisions of this contract.

Annex 5 to the draft regulations

Environmental guidelines for prospecting

In order to minimize or eliminate adverse environmental impacts, prospectors shall:

(a) Plan and manage prospecting activities in a manner consistent with the sustainable use of the operating area, including the protection of the marine environment and its biodiversity;

(b) Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation;

(c) Apply the best available site-specific risk and environmental assessment techniques to identify potential adverse environmental impacts, their possible consequences and the probabilities of their occurrence;

(d) Apply the best available risk and environmental management techniques to minimize or eliminate potential environmental risks and impacts identified;

(e) Optimize the application of sampling techniques and the use of samples in order to avoid unnecessary disturbance of the operating site;

(f) Ensure that prospecting sites are rehabilitated and left in a safe and stable condition after taking into account future uses of the site and the surrounding seabed.